1. SOW & Deliverables

1.1 **SOW**

This CWO has two major components, each with subcomponents.

- Support the current operational versions of GCF Monitor & Control Processor (GMP) and Station Communications Processor (SCP) by:
 - a. Responding to reported problems and delivering corrections.
 - b. Providing testing and test support.
 - c. Supporting benchmarking of SCP CPU upgrades as required.
- 2 Contribute to the success of the Encore Replacement Task in the Special Function Gateway (SFG) and GMP areas and support the overall Advanced Communications System (ACS) project. Specifically, this will involve:
 - a. Providing technical advice to JPL with respect to
 - Operational concepts.
 - Requirements definition and analysis and identifying core requirements as distinct from desired requirements.
 - Strengths & weaknesses of specific technical approach alternatives.
 - Overall design.
 - Interface specification & design.
 - b. Support JPL's evaluation of alternative hardware & software components and configurations,
 - Implement and deliver the assigned software and its associated test materials and documentation. This includes:
 - Refining requirements to reduce ambiguity & misinterpretation.

- Developing design(s) through either formal mechanisms or through prototyping.
- Implementing deliverable software and documenting the software using Software Development Folders.
- Supporting software delivery to SPMC and thence to operations.
- Helping to develop test plans and test approaches and supporting the testing efforts.
- Providing requirements, design, implementation, and user documentation.
- Supporting user training as necessary.
- Participating in inspections, peer reviews, technical reviews, and management reviews as necessary.

1.2 Deliverables

1 Software and associated help files, screen definitions, tables, build procedures, etc necessary to build, install, execute, and maintain the software.

Due date: TBD

- 2 Documentation inputs or complete documents as negotiated between the ISDS team and the JPL ACS team for:
 - a. Operational concepts
 - b. Requirements and functional specifications
 - c. System and Software Design
 - d. System Description
 - e. Software Operators Manual (SOM)
 - f. Test Plans and test scenarios
 - g. Maintenance documentation
 - h. Release Descriptions

 Memos and task correspondence as needed

Due date on all items: TBD

3 Training Materials (e.g., slides, handouts) as necessary.

Due date: TBD

1.3 Notes

1 The activities of this CWO are embedded in a larger activity which is taking an integrated product team approach to deliver a working capability on an ambitious schedule. Many activities will involve more than one person and be a mix of contractor and JPL staff. At this time, responsibility for individual documents has not been assigned. Therefore, the work will either be to provide inputs to documents for which other team members are responsible or to create documents containing inputs from other team members. Those decisions are not yet made. However, the use of Soft-

- ware Development Folders will reduce the effort required to gather and produce documentation regardless of specific document responsibility.
- 2 Details as to responsibilities, schedules, and delivery dates will be agreed on between JPL and ISDS during the development of the Work Implementation Plan (WIP) and will be included therein.

1.4 Estimated Effort & Staffing

The estimated effort involves three (3) programmers full time through September 17, 1995 with modest management and documentation support.

It is estimated that this effort will be staffed at 3.0 work months per month throughout the period of performance.

Two key ISDS staff members are Erik Barkley and Brian Schladen.